



# VISION ZERO

**NO TRAFFIC DEATHS BY 2030  
IN MONTGOMERY COUNTY**

**OUR PLAN TO ELIMINATE FATALITIES AND  
SEVERE INJURIES ON OUR ROADS BY 2030**

**TWO-YEAR ACTION PLAN • OCT 2017**







## LETTER FROM THE COUNTY EXECUTIVE

*Will be added after review by PBTSAC.*



# ACKNOWLEDGEMENTS

## MONTGOMERY COUNTY

**The Honorable Isiah Leggett**, County Executive

### COUNCIL MEMBERS

**Hon. Roger Berliner**, District 1 (President)

**Hon. Han Riemer**, At-large (Vice-president)

**Hon. Marc Elrich**, At-large

**Hon. Nancy Floreen**, At-large

**Hon. Tom Hucker**, District 5

**Hon. Sidney Katz**, District 3

**Hon. George Leventhal**, At-large

**Hon. Nancy Navarro**, District 4

**Hon. Craig Rice**, District 2

### DEPARTMENT OF TRANSPORTATION

**Al Roshdieh**, Director

### POLICE DEPARTMENT

**J. Thomas Manger**, Chief

### OFFICE OF PUBLIC INFORMATION

**Patrick Lacefield**, Director

### FIRE AND RESCUE SERVICE

**Scott Goldstein**, Chief

## THANK YOU TO THE AGENCIES AND ORGANIZATIONS WHO PARTICIPATED IN THE DEVELOPMENT OF THIS ACTION PLAN

Action Committee for Transit

Maryland State Highway Administration

Maryland-National Capital Park and Planning  
Commission

Montgomery County Health and Human Services

Montgomery County Office of the County Attorney

Montgomery County Council

Montgomery County Department of Correction and  
Rehabilitation

Montgomery County Office of Emergency  
Management and Homeland Security

Montgomery County Office of Intergovernmental  
Relations

Montgomery County Pedestrian and Bicycle Traffic  
Safety Advisory Committee

Montgomery County Public Schools

Montgomery CountyStat

Washington Area Bicyclist Association



TABLE OF CONTENTS

WHAT IS VISION ZERO? ..... 1

HOW IS VISION ZERO DIFFERENT? ..... 2

WHY IS VISION ZERO IMPORTANT? WHY ADOPT IT NOW? ..... 3

THE CURRENT STATE OF ROADWAY SAFETY: DATA ANALYSIS ..... 4

ACTION PLAN DEVELOPMENT ..... 9

ROAD TO VISION ZERO ..... 13

TWO-YEAR ACTION PLAN ..... 14

ENGINEERING ..... 15

ENFORCEMENT ..... 18

EDUCATION AND TRAINING ..... 20

TRAFFIC INCIDENT MANAGEMENT ..... 23

LAW, POLICY, AND ADVOCACY ..... 25

SHARED MISSION, SHARED ACCOUNTABILITY ..... 29





Road traffic crashes are predictable and therefore preventable ... the time to act is now.

Road users everywhere deserve better and safer road travel.

*World Health Organization, 2004*



# ZERO



## WHAT IS VISION ZERO?

The Vision Zero concept for roadway safety was created in Sweden in 1997 and is widely credited for significant reductions in fatal and severe collisions on Sweden's roads, despite increased driving, biking, and transit use.<sup>1</sup> Vision Zero came to the US in 2000 with Washington State adopting its Target Zero plan.<sup>2</sup> In 2014, New York City became the first city to adopt Vision Zero, and the idea has since taken off.<sup>3</sup> As of March 2017, Vision Zero has spread to 27 jurisdictions across the country.<sup>4</sup> Vision Zero policies generally share six common principles:

1. Transportation-related deaths and severe injuries are preventable and unacceptable.
2. Human life takes priority over mobility and other objectives of the road system. The road system should be safe for all users, for all modes of transportation, in all communities, and for people of all ages and abilities.
3. Human error is inevitable; the transportation system should be designed to anticipate error so the consequences are not severe injury or death. Advancements in vehicle design and technology, roadway engineering, personal electronic devices, etc., are necessary components for avoiding the impacts of human errors.
4. People are inherently vulnerable, and speed is a fundamental predictor of crash survival. The transportation system should be designed for speeds that protect human life.
5. Safe human behaviors, education, and enforcement are essential contributors to a safe system.
6. Policies at all levels of government need to align, making safety the highest priority for roadways.

### *SPEED IS A MAJOR FACTOR IN CRASH SURVIVABILITY FOR PEDESTRIANS*



**Source:** Brian Tefft, "Impact Speed and a Pedestrian's Risk of Severe Injury or Death," AAA Foundation for Traffic Safety, 2011



## HOW IS VISION ZERO DIFFERENT?

A new approach to roadway safety and engineering is needed to eliminate severe and fatal collisions as traditional methods will lead to traditional results.

In Vision Zero, transportation agencies employ a safe system approach to reduce severe and fatal traffic collisions. According to the International Transport Forum, a safe systems approach,

*"... is a holistic and proactive approach to road safety, managed so the elements of the road transport system combine and interact to guide users to act safely and to prevent crashes – and when crashes occur, ensure that impact forces do not exceed the limits that result in serious injury or death." (p. 157)*

### CRASH, NOT ACCIDENT

Traffic crashes are not inevitable accidents. Vision Zero communities study the environmental and behavioral factors that lead to severe and fatal collisions and use leading practices to create a safer system for all roadway users.

The safe system approach differs from traditional methods in the following ways,

Traditional Road Safety Approach	Versus	Safe System Approach
Try to prevent all crashes	<b>What is the problem?</b>	Prevent crashes from resulting in fatalities and severe injury
Reduce the number of fatalities and serious injuries	<b>What is the appropriate goal?</b>	Zero fatalities and severe injuries
Reactive to incidents Incremental approach to reduce the problem	<b>What are the major planning approaches?</b>	Proactively target and treat risk Systematic approach to build a safe road system
Non-compliant road users	<b>What causes the problem?</b>	People make mistakes and people are physically fragile/vulnerable in crashes. Varying quality and design of infrastructure and operating speeds provides inconsistent guidance to users about what is safe use behavior.
Individual road users	<b>Who is ultimately responsible?</b>	Shared responsibility by individuals with system designers
The system is composed of isolated interventions	<b>How does the system work?</b>	Different elements of a safe system combine to produce a summary effect greater than the sum of the individual treatments – so that if one part of the system fails other parts provide protection.

**Source:** "Zero Road Deaths and Serious Injuries: Leading a Paradigm Shift to a Safe System," *OECD/ITF*, 2016.

Going forward, Montgomery County is committed to a safe systems approach to build infrastructure that provides safe passage for all road users.

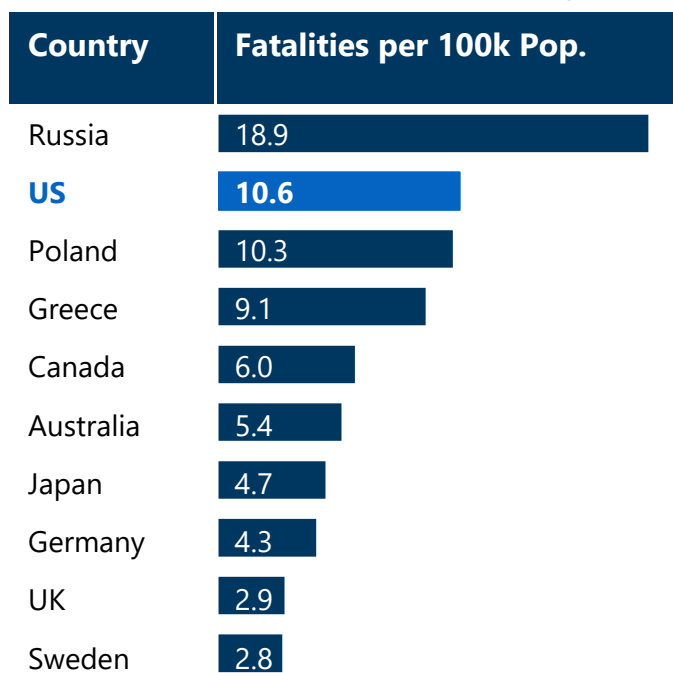


## WHY IS VISION ZERO IMPORTANT? WHY ADOPT IT NOW?

The status quo on our roads in Montgomery County and across the United States is unacceptable. The United States is an outlier for traffic fatalities compared to other high income countries.<sup>5</sup> On average, more than 35 people lost their lives and 400 were severely injured on roads in Montgomery County, Maryland, annually between 2012 and 2016. These are not *accidents* and they are not an inevitable “cost of doing business” in the modern world. Behind every traffic safety statistic is a real person whose life is forever changed in one moment. No one in our community should have to grieve the loss of a loved one as the result of a traffic crash. That is why Montgomery County is committed to Vision Zero.

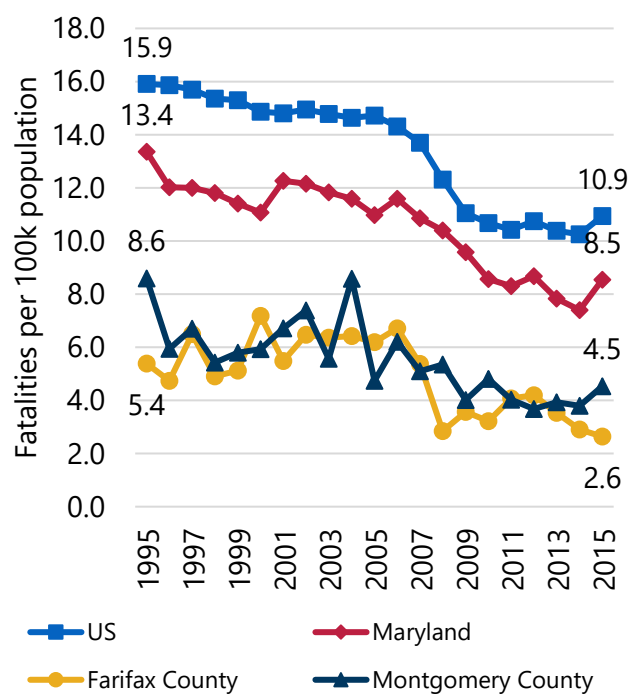
Montgomery County will be one of the first county governments in the United States to initiate a Vision Zero plan. Vision Zero will build upon the successes of the County Executive’s 2008 Pedestrian Safety Initiative, a strategic safety plan which incorporated many tenets of Vision Zero.<sup>6</sup> From 2010 to 2016, the County has prevented 250 severe and 33 fatal collisions through the Pedestrian Safety Initiative compared to the five-year average before the initiative began.

ROADWAY FATALITY RATES BY COUNTRY, 2013



**Source:** “Global Health Observatory Data Repository”, *World Health Organization*, 2017.

MONTGOMERY COUNTY TRAFFIC FATALITY RATE COMPARED TO US, MARYLAND, AND FAIRFAX CO



**Source:** “Fatality Analysis Reporting System,” *NHTSA*, 2017.



## THE CURRENT STATE OF ROADWAY SAFETY: DATA ANALYSIS

Montgomery County has the opportunity to be one of the first counties in the United States to adopt a Vision Zero strategy. Most jurisdictions that have adopted Vision Zero are major cities where the population density and roadway network allow for more uniform strategies across the jurisdiction. Montgomery County, by contrast, cannot rely on a one-size-fits-all solution given the diversity of our neighborhoods that vary from urban Silver Spring to suburban Germantown to rural Poolesville. In addition, the State of Maryland has primary jurisdiction over major roadways where 53% of severe and fatal collisions occur. To eliminate severe and fatal collisions, countermeasures and education campaigns will be tailored to the unique environments that exist in the County by utilizing county, state, and federal data.

### SEVERE AND FATAL COLLISIONS

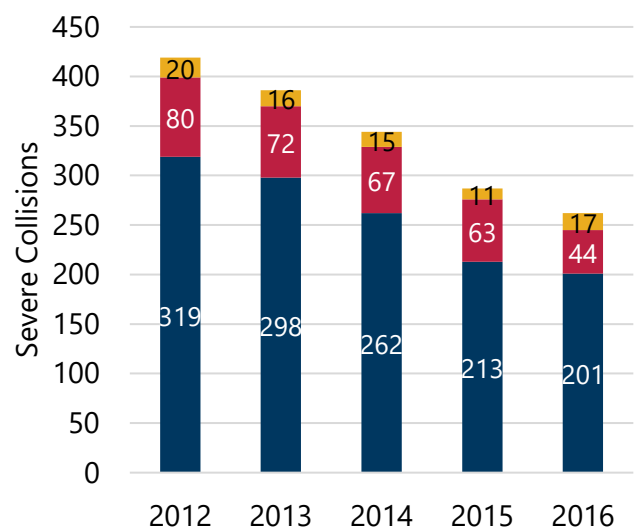
#### OVERALL TREND

In developing this Two-Year Action Plan, collision data collected by the Montgomery County Police Department (MCPD) covering 2012 to 2016 were analyzed. There were 1,849 collisions that resulted in 1,997 severe injuries and 173 fatalities to drivers, passengers, pedestrians, and bicyclists. During this period, the number of severe collisions declined 37%, but fatal collisions increased 58%. The majority of the increase was for vehicle occupants.

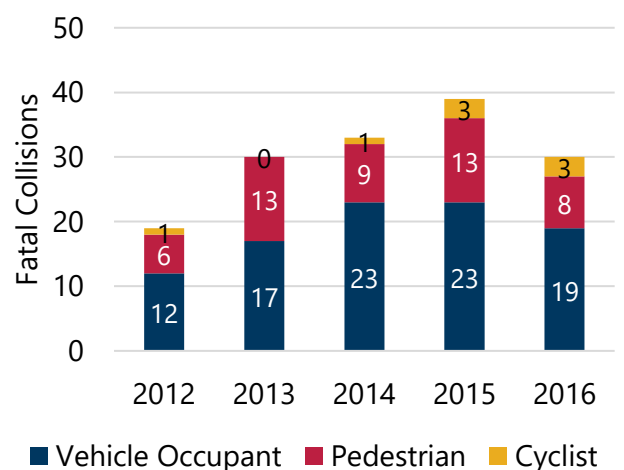
The data presented in this plan does not include every severe and fatal collision that occurred in the county during the analysis period. The main areas excluded are the interstates, I-495 and I-270, and the City of Takoma Park. These areas were omitted for two reasons. First, MCPD's records did not include reports from the departments listed in the right column in the table below. Second, this action plan is designed to focus on areas where the County Government can best use its resources on roadways it maintains and can do enforcement.

Reports Included	Reports Not Included
Montgomery County PD	MD State Police
Rockville PD	MD Transit Authority
Gaithersburg PD	Takoma Park
	M-NCPPC Park Police
	Chevy Chase Police

SEVERE COLLISIONS, 2012-2016



FATAL COLLISIONS, 2012-2016

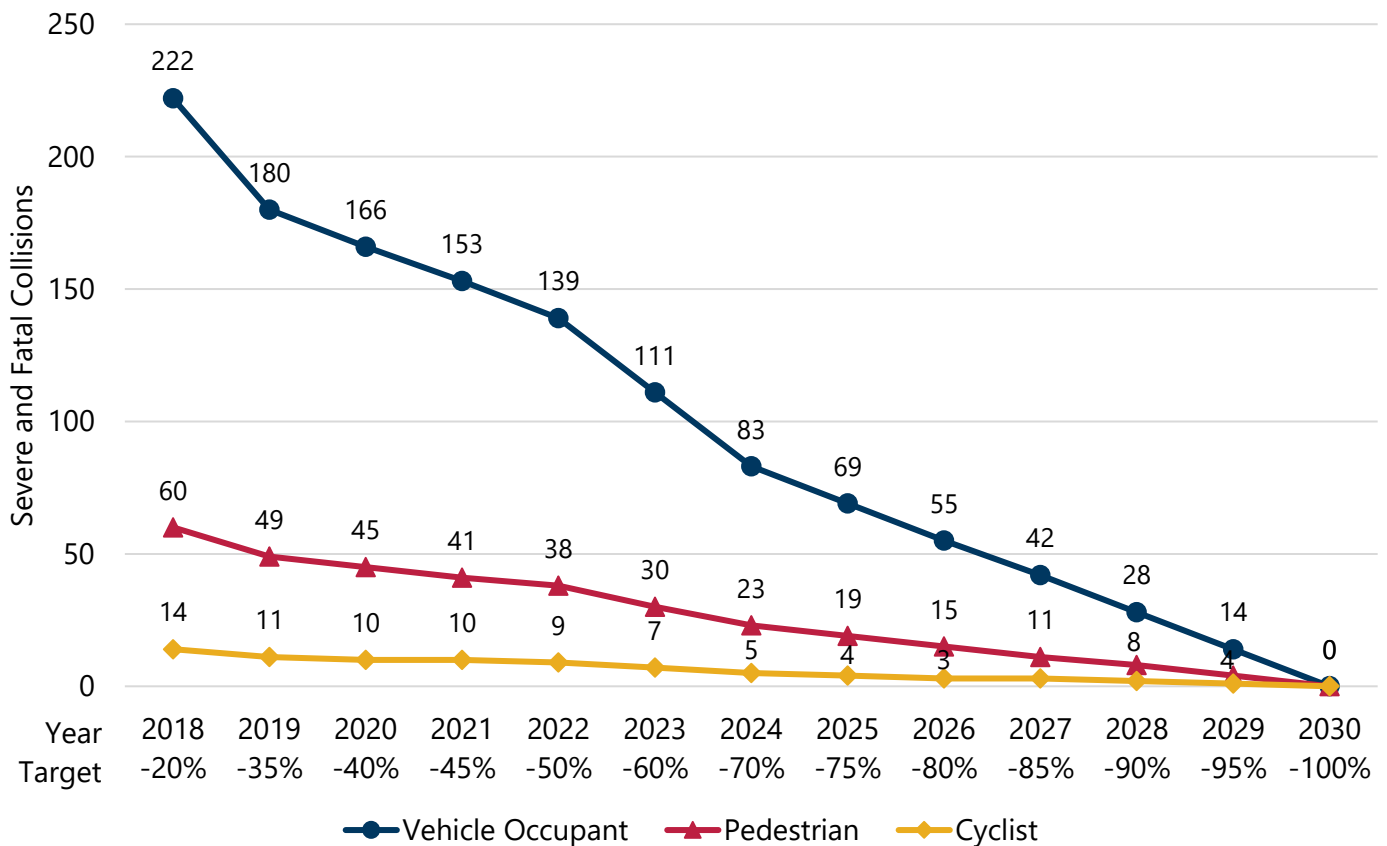
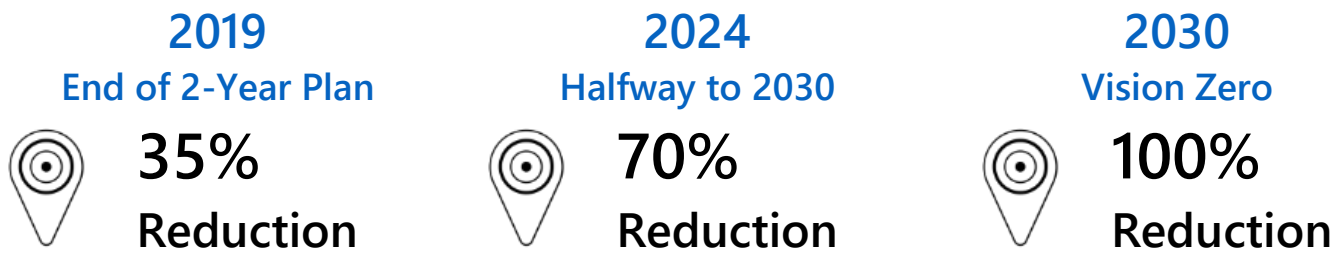




## COLLISION REDUCTION TARGETS

To get to zero severe and fatal collisions on our roadways by 2030, the County has set ambitious interim targets. By the end of the Two-Year Action Plan, severe and fatal collisions for all roadway users will be reduced by 35%. By 2022, severe and fatal collisions will be cut in half.

The reduction targets were set using the five-year average from 2012 to 2016 as a baseline. The most significant reductions are in the middle years, 2022 through 2025, as completed engineering projects start to bear fruit. In the final four years, the pace slows to 5% per year reductions as the last few collisions will be the toughest to eliminate.





GEOSPATIAL ANALYSIS OF SEVERE AND FATAL COLLISIONS

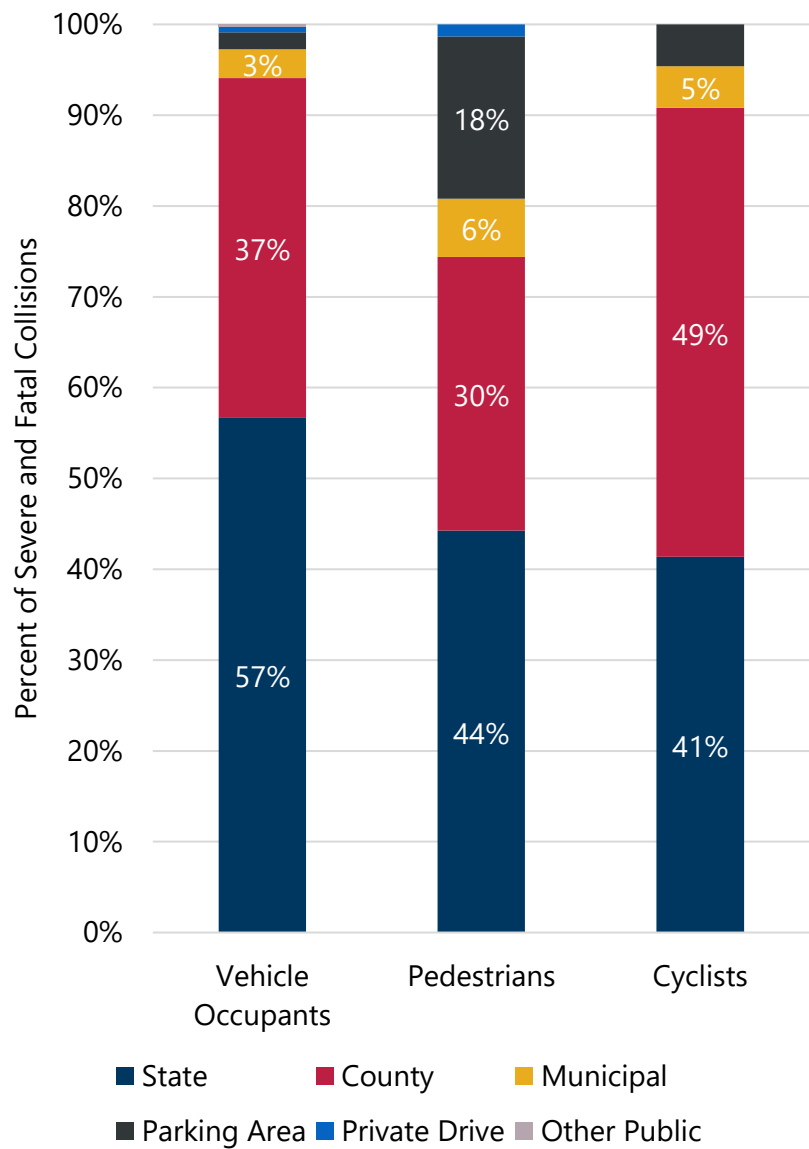
This section is under construction. It will include a map of the high injury network, collisions by speed limit, collisions by roadway functional class, and comparisons to collision density to neighborhood characteristics.

SEVERE AND FATAL COLLISIONS BY ROADWAY OWNER

Roadways in Montgomery County fall under five main categories: state, county, municipal, other public (National and Maryland Parks), and private. The State of Maryland has primary jurisdiction over 17% of non-interstate lane miles in the County and 52% of all non-interstate vehicle miles traveled, which account for 53% of the County’s severe and fatal collisions. The link between the County and State is discussed in detail on page 12.

Nearly two in 10 severe or fatal pedestrian collisions occurred in parking lots and garages. In the parking area collisions, 21% were the result of the vehicle backing, 18% were the result of the vehicle moving at a constant speed, and 13% were the result of the vehicle accelerating.

Cyclists had the highest rate of severe and fatal collisions on County maintained roadways at 49%. This should be expected given that State-maintained roadways are multi-lane highways that are stressful for cyclists and would have less overall volume of cyclists compared to local roads.



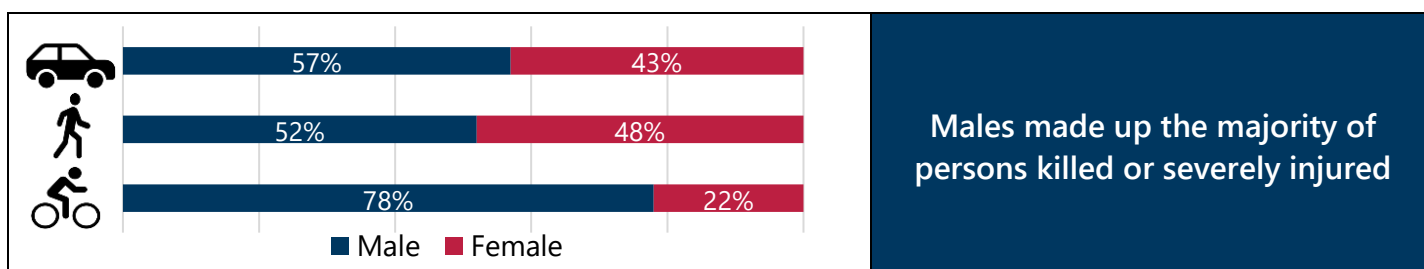
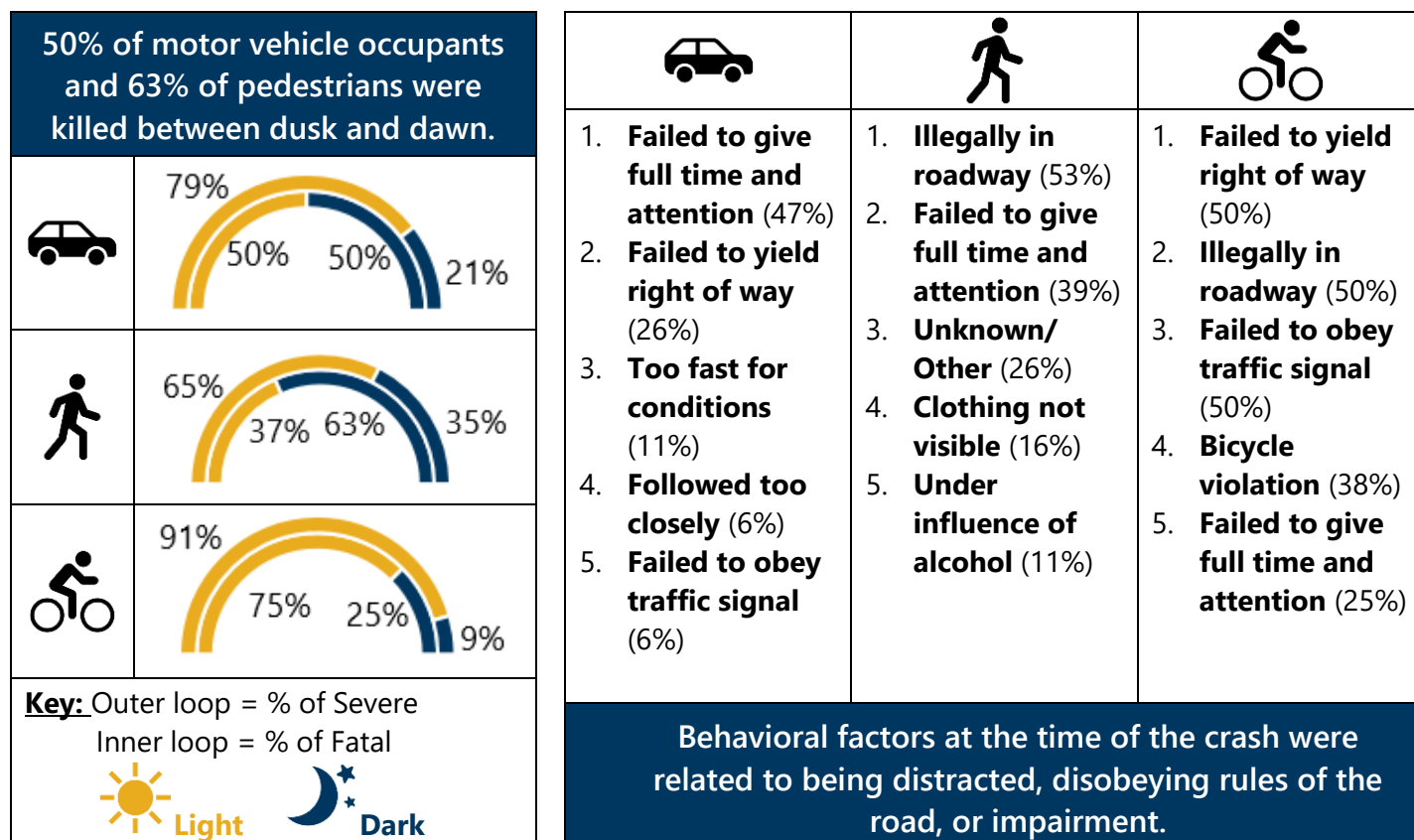
NON-INTERSTATE LANE MILES BY ROADWAY OWNER




	State	County	Municipal	Total
Lane Miles	1,167	4,877	773	6,817
Percent of Total	17%	72%	11%	100%



## COLLISION FACTORS SUMMARY

The data shown below are a summary of the information collected by law enforcement about the parties, environmental, and behavioral factors involved in the collision. More details about these factors can be found in the supplemental data analysis document available on the County's Vision Zero website.







Our youngest and oldest residents were most at risk for severe and fatal collisions			
	<ol style="list-style-type: none"> <li>1. <b>13-19:</b> 275</li> <li>2. <b>80+:</b> 259</li> <li>3. <b>20-29:</b> 256</li> </ol>	<ol style="list-style-type: none"> <li>1. <b>20-29:</b> 53</li> <li>2. <b>80+:</b> 47</li> <li>3. <b>60-69:</b> 46</li> </ol>	<ol style="list-style-type: none"> <li>1. <b>10-19:</b> 18</li> <li>2. <b>50-59:</b> 10</li> <li>3. <b>70-79:</b> 9</li> </ol>

**Key:** Rates are total collisions per 100,000 registered drivers for drivers and per 100,000 residents for pedestrians and cyclists


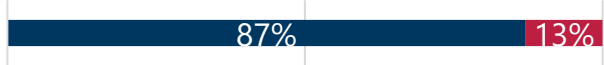



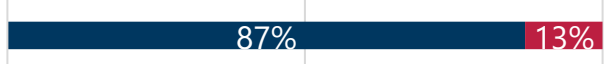




## MOTOR VEHICLE OCCUPANT COLLISIONS



### MOST COMMON COLLISION TYPES

In half of fatal collisions, the driver did not collide with another vehicle. Left turns were 10 times more likely to result in a severe or fatal collision compared to right turns.							
 Same Direction Rear End		 Left Turn		 Straight Movement Angle		 Single Vehicle	
Severe	Fatal	Severe	Fatal	Severe	Fatal	Severe	Fatal
27%	3%	19%	11%	19%	15%	18%	50%

### SAFETY EQUIPMENT USED

Seatbelt use was three times lower in fatal crashes compared to severe crashes.		Severe  Fatal 
Helmet use for motorcycle and moped operators was nearly equal for both crash types		Severe  Fatal 
<b>Key:</b>  Used safety equipment  Did not use safety gear		

### PEDESTRIAN AND CYCLIST COLLISIONS WITH MOTOR VEHICLES - MOVEMENT

			Pedestrians are more likely to be severely injured or killed from left-turning vs right-turning motor vehicles. Cyclists had equal likelihood of injury from left and right turns.
<b>Top 3 Motor Vehicle Movements</b>	1. <b>Constant speed:</b> 40% 2. <b>Left turn:</b> 14% 3. <b>Accelerating:</b> 8%	1. <b>Constant speed:</b> 36% 2. <b>Left turn:</b> 18% 3. <b>Right turn:</b> 17%	
<b>Top 3 Ped/Bike Movements</b>	1. <b>Cross/enter at Intersection:</b> 40% 2. <b>Cross/enter not at Intersection:</b> 22% 3. <b>Other:</b> 11%	1. <b>Cross/enter at Intersection:</b> 42% 2. <b>Riding with traffic:</b> 25% 3. <b>Riding against traffic:</b> 25%	



## ACTION PLAN DEVELOPMENT

The Two-Year Action Plan is the result of a yearlong process that included several critical sources of input:

1. Review of previous roadway safety efforts in the County
2. Review of promising practices from other Vision Zero communities
3. Analysis of collision data to identify trends and significant issues to inform the plan
4. Consultation with County Agencies; the Pedestrian, Bicycle, and Traffic Safety Advisory Committee; and other stakeholders and interested parties

Every community that has adopted Vision Zero has grappled with the challenge of balancing short-term, immediate responses with a measured, long-term data-informed approach towards systematically eliminating fatal and severe crashes. The Two-Year Action Plan sets out to bridge the desire to react quickly and the equally important need to build up a knowledge base in order to take a long-term, proactive approach. Experience from around the world tells us that Vision Zero works best when it is firmly driven by reliable and consistent data, and when traffic safety is seen as a multi-disciplinary issue in which everyone in the community has a stake. This plan lays out a series of actions that will establish a solid foundation for a longer-term strategy, and allow rapid response to issues that do not require additional in-depth analysis. The plan is also a natural extension of existing County programs and initiatives related to traffic safety.

## PREVIOUS ROADWAY SAFETY ACCOMPLISHMENTS

While Vision Zero is new to Montgomery County, the principles behind Vision Zero are not. The County Executive has prioritized safe streets and an effective and efficient transportation network since taking office in 2007. In December 2007, the County Executive launched the Pedestrian Safety Initiative.<sup>7</sup> The initiative identified seven strategies that County departments would utilize to reduce the number of pedestrian collisions in the County. Based on collision data, the County identified 17 high incidence areas (HIAs) for targeted engineering, education, and enforcement activities. The strategy, actions, and results have been reviewed each year in a CountyStat session with representatives from the Office of the County Executive, Department of Transportation, Police Department, and Public Information Office to ensure the initiative was being implemented with fidelity and emerging issues were being adequately addressed.

Since 2008, Montgomery County has experienced dramatic decreases in the number of severe and fatal pedestrian collisions. In the five years prior to the initiative, Montgomery County averaged 110 severe and 15 fatal collisions annually. From 2010-2016, the average dropped to 75 severe (32% decrease) and 10 fatalities (33% decrease). Progress would not have been possible without dedicated funding and a clear strategy for improving the pedestrian environment in the County. Some of the key activities undertaken for the Pedestrian Safety Initiative include:



## ENGINEERING

- Completed 3,083 bus stop improvements and 245 new Americans with Disabilities Act (ADA) accessibility improvements
- Retimed traffic signals to increase pedestrian crossing times
- Increased the County's existing 90 miles of bicycle infrastructure by adding bicycle-only infrastructure such as the Nebel St. buffered bicycle lanes in the Pike District
- Implemented traffic calming projects which resulted in reductions in speeding and a 44% reduction in pedestrian collisions
- Implemented projects in high incidence areas (HIAs) leading to a 52% reduction in pedestrian collisions in those HIAs
- Constructed 30 miles of new sidewalk segments

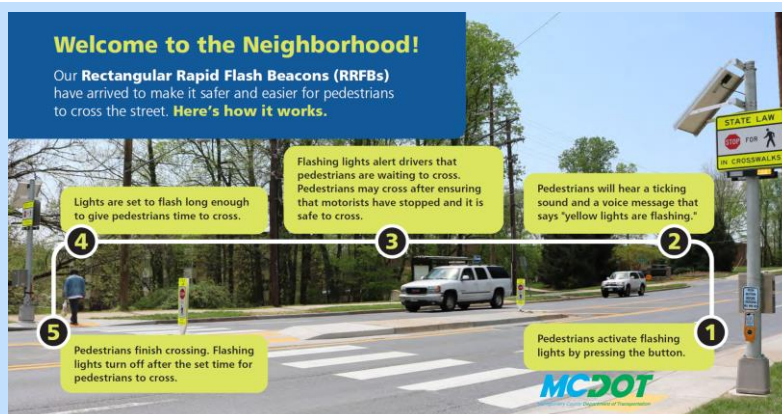
## ENFORCEMENT

- Targeted high-visibility enforcement in HIAs and around schools in coordination with Department of Transportation education efforts. From 2012 to 2016, MCPD increased the number of citations and warnings given to drivers violating pedestrian safety by 379% and pedestrians by 56%

- Utilized speed, red-light, and bus cameras to curb unsafe driver behavior. During the 2016 -2017 school year, the new bus cameras resulted in 15,446 citations for failing to stop for children walking to or leaving the bus.

## EDUCATION

- The Public Information Office developed an outreach strategy for private parking lots in 2012 after seeing that 20% of pedestrian collisions occurred in those lots from 2008 to 2011
- Conducted targeted education campaigns for drivers and pedestrians in high incidence areas
- Worked with regional partners through annual Street Smart campaigns to urge drivers and pedestrians to engage in safe driving and walking
- Educated elementary and middle school students through the Safe Routes to School initiative to promote walking or biking
- Reached out to high school students through the innovative You Only Live Once (YOLO) walk safe campaign that included social media and school partnering



**Education in Action:** Above is an example from the Department of Transportation's outreach for the new rectangular rapid flash beacons (RRFBs) installed along Bel Pre Road. On the left is a postcard sent to households in the area and the right is a photo from the on-street outreach event.



## STAKEHOLDER AND COMMUNITY ENGAGEMENT

The County Government and community stakeholders broke out into six focus areas to create the Two-Year Action Plan. Dedicated staff, volunteers and community members met to discuss key issues, share information about existing programs and opportunities, and develop recommended action items for inclusion in the plan. The six focus groups were:

1. Aggressive and impaired driving
2. Distracted driving and occupant protection
3. Pedestrians and bicyclists
4. Traffic incident management
5. Vehicle technology
6. Roadway infrastructure

Focus areas 1-3 were tied to issues identified in the County's collision data. Aggressive, distracted, and impaired driving are the primary causes for fatal and severe injury crashes in the County. Pedestrians and bicyclists are over-represented in the crash data relative to the percentage of trips made by the two modes. Focus areas 4-6 were identified for their potential to reduce fatal and severe injury crashes moving forward. For example, the deployment of collision avoidance technology and the development of "smart roads" has the potential to reduce or eliminate severe crashes in the future.

While most focus group stakeholders represented County departments, all focus groups included participation from the public and outside government agencies. Stakeholders outside Montgomery County Government included, but were not limited to, the Montgomery County Planning Department, Maryland State Highway Administration, Maryland Highway Safety Office, members of the Pedestrian, Bicycle, Traffic Safety Advisory Committee (PBTSAC), Action Committee

for Transit (ACT), and the Washington Area Bicyclist Association (WABA).

Each focus area was asked to identify action items that would contribute to the County's goal of zero severe or fatal collisions by 2030. The resulting list of actions was reviewed and synthesized into five categories: Engineering; Enforcement; Education and Training; Traffic Incident Management; and Law, Policy, and Advocacy.



Meeting of Traffic Incident Management Group

Going forward, the County is committed to improving stakeholder engagement – including broader public engagement, partnership with the Maryland State Highway Administration, leadership by County departments and outside agencies not traditionally involved in roadway safety, input from advocacy groups, business owners and other institutions located in Montgomery County, and other stakeholders that are yet to be identified. This engagement will take place through public meetings and hearings, interactive information technology, social media, and other venues. As we proceed with the major activities included in the Two-Year Action Plan, we will actively reach out to these stakeholders, and will develop longer term engagement strategies and actions to be captured in the Ten-Year Action Plan.



## VISION ZERO AND MARYLAND'S STRATEGIC HIGHWAY SAFETY PLAN

Montgomery County will never reach zero severe or fatal collisions without a strong partnership and commitment from the State of Maryland. The State of Maryland has primary jurisdiction over 17% of non-interstate lane miles in the County and 52% of all non-interstate vehicle miles traveled, which account for 53% of the County's severe and fatal collisions.

The Two-Year Action Plan is designed to be the County's local counterpart to the State of Maryland's 2016-2020 Strategic Highway Safety Plan (SHSP). The County's planning mirrored the SHSP in numerous ways, including:

- Stating that traffic collisions are tragic, preventable occurrences
- Using a data-informed process to identify needs and countermeasures on roadways
- Setting reduction targets for severe and fatal traffic collisions
- Employing strategies built around engineering, education, enforcement, and emergency medical services
- Adopting similar focus areas, which are listed in the table on the right

Read the State of Maryland's 2016-2020 Strategic Highway Safety Plan at [towardzerodeathsmd.com](http://towardzerodeathsmd.com)



### STATE AND COUNTY FOCUS GROUP AREAS

State SHSP Focus Areas	County Vision Zero Focus Areas
Aggressive driving	Aggressive and impaired driving
Impaired driving	
Distracted driving	Distracted driving and occupant protection
Occupant protection	
Pedestrians & bicyclists	Pedestrians & bicyclists
Highway infrastructure	Roadway infrastructure
	Traffic incident management
	Vehicle technology

Montgomery County's Two-Year Vision Zero Plan sets a more aggressive timeline for safety improvements and endeavors to be a model for the State and other counties in Maryland. The County plan aims to eliminate severe and fatal collisions by 2030 whereas the SHSP sets a 50% reduction from a 2008 baseline by 2030. The County will meet its goals through completion of specific actions by set deadlines rather than the SHSP's approach of setting broad strategies for each focus group.

The County remains engaged with the State to create safe environments on all roadways. County employees are leading and participating in the State's emphasis areas, using data to highlight areas of concern on State maintained roadways, and identifying projects where the County and State can make significant improvement.



## ROAD TO VISION ZERO

### January 2002

Blue Ribbon Panel Report on Pedestrian and Traffic Safety Released

### October 2015

MCDOT adopts "Moving Forward Together" vision document

### June 2016

County Executive establishes Vision Zero Steering Committee

### November 2016

Focus area stakeholder groups meet to develop Action Plan

### October 2017

Two Year Action Plan Approved

### October 2018

Vision Zero 1-Year Progress Report

### 2019 and Beyond

Annual updates to 10-Year Plan Strategies and annual progress reports

### December 2007

Pedestrian Safety Initiative Launched  
(Full funding started in July 2009)

### February 2016

County Council adopts Vision Zero Resolution

### September 2016

1<sup>st</sup> Vision Zero stakeholder meeting

### July 2017

1<sup>st</sup> Action Plan draft reviewed by PBTSAC

### October 2017 to October 2018

Outreach and input to build 10 Year Plan

### December 2018

1<sup>st</sup> Draft of 10 Year Plan

### 2030

Zero traffic fatalities and severe injuries



## TWO-YEAR ACTION PLAN

Adopting a Vision Zero policy is challenging. The goal of zero appears impractical, and yet no higher number is acceptable. Balancing immediate action with long-term strategy demands focus and patience in equal measure. Additionally, Vision Zero requires a new way of doing business from agencies and staff that have been working diligently in this field for years. The Action Plan includes items that will require new investments, but the real value of Vision Zero lies in its ability to re-orient and re-focus existing programs and projects with a data-informed, safe systems approach that makes more effective use of current resources.

To reach the goal of zero severe and fatal collisions by 2030, the Action Plan lays out specific activities with deadlines for implementation. All 41 action items are built around five key action areas: Engineering; Enforcement; Education and Training; Traffic Incident Management; and Law, Policy, and Advocacy.

### ENGINEERING

- **LEAD:** Department of Transportation
- **KEY OUTCOME:** Reduction in severe and fatal collisions in High Injury Areas (HIAs)

### ENFORCEMENT

- **LEAD:** Police Department
- **KEY OUTCOME:** Hours of dedicated enforcement for factors contributing to severe and fatal collisions

### EDUCATION AND TRAINING

- **LEAD:** Public Information Office
- **KEY OUTCOME:** Increased awareness of dangerous driving, biking, and walking behaviors

### TRAFFIC INCIDENT MANAGEMENT

- **LEAD:** Fire and Rescue Service
- **KEY OUTCOME:** Maintain response times for traffic collisions with injuries based on department standards

### LAW, POLICY, & ADVOCACY

- **LEAD:** Vision Zero Steering Committee
- **KEY OUTCOME:** Passage of significant laws and policies required to implement Vision Zero





## LEAD:

Department of Transportation

## Key Outcome:

Reduction in severe and fatal collisions in High Injury Areas (HIAs)



## ENGINEERING

Vision Zero requires an evidence-based, safe systems approach for all the County's transportation infrastructure. The safe systems approach prioritizes safety above all else and designs such that roadway users' mistakes do not result in severe injuries or fatalities.

### ENG-1: Crash Analysis

**Lead:** CountyStat (county-wide), Transportation (HIAs)

**Support:** Police

**Action:** Undertake a detailed, multi-disciplinary Countywide crash study to provide a comprehensive understanding of traffic crash causes, contributing factors, locations, and roadway characteristics. This study should identify the high injury areas (HIAs) and provide the foundation for the ten-year action plan

**Why do this:** Identifying collision patterns, types, and similar site characteristics is required to use our resources in a targeted manner to eliminate severe and fatal collisions.

**Deadline:** Identify priority HIAs by 12/31/2017

**Metric(s):** Complete Action

### ENG-2: Update County Road Design Standards

**Lead:** Transportation

**Support:** Park and Planning

**Action:** Establish a committee to review and revise roadway design standards and develop complete street guidelines utilizing leading practices from groups such as NACTO, ITE, and AASHTO for various types of roadways within the County. The review should prioritize reducing opportunities for high-speed collisions through physical or temporal separation, reducing motor vehicle speeds where separation cannot be achieved, and developing proper environmental countermeasures (lighting, signing, signals, marking).

**Why do this:** County Council Bill 33-13 requires the adoption of a complete streets policy.<sup>8</sup> Adoption of road design standards that align to Vision Zero goals are essential in order to identify and implement proper safety countermeasures.

**Deadline:** Publish revised road designs by 10/1/2019

**Metric(s):** Complete Action



ENG-3: Expand Road Safety Audits	
<b>Lead:</b> Transportation	<b>Support:</b> N/A
<b>Action:</b> Implement a road safety audit process for all new County road and facility projects.	
<b>Why do this:</b> Ensure that all work performed by MCDOT has a safety-first approach	
<b>Deadline:</b> Implement new process by 10/1/2018	
<b>Metric(s):</b> Complete Action	

ENG-4: Review Transit Stops	
<b>Lead:</b> Transportation	<b>Support:</b> WMATA (Metro), State Highway Admin.
<b>Action:</b> Develop a program to review transit stop locations and conditions to ensure safety and accessibility. Priority will be given first to HIAs, but all stops will be reviewed every 5 years.	
<b>Why do this:</b> A significant number of pedestrian crashes are associated with transit users crossing to/from transit stops. Redevelopment or even small changes can modify pedestrian desire lines driving the need for continual reevaluation.	
<b>Deadline:</b> Develop program review requirements by 4/1/2018	
<b>Metric(s):</b> Percentage of transit stops with safe crossings, Number of severe and fatal collisions related to going to or leaving a transit stop	

ENG-5: Redesign Trail Crossings and Intersections	
<b>Lead:</b> Transportation	<b>Support:</b> Park and Planning, State Highway Admin.
<b>Action:</b> Redesign trail crossings and intersections with safety as a priority. Crossings identified as high risk (high posted speed, multiple lanes, and roadway median) will be transformed first.	
<b>Why do this:</b> Ensure that vulnerable users (pedestrians and cyclists) can cross safely	
<b>Deadline:</b> Develop list of priority trail crossings and intersections for modification by 10/1/2018	
<b>Metric(s):</b> Percentage of trails and intersections with safe crossings, Number of severe and fatal collisions at trail crossings and intersections	

ENG-6: State/County Project Collaboration	
<b>Lead:</b> Transportation	<b>Support:</b> State Highway Admin.
<b>Action:</b> Identify, at minimum, two high injury areas where the County and State can jointly implement safety improvement projects	
<b>Why do this:</b> The majority of severe and fatal collisions occur on state-maintained roads. These joint projects will encourage a positive working relationship.	
<b>Deadline:</b> Identify potential project areas by 1/1/2018	
<b>Metric(s):</b> Number of severe and fatal collisions occurring in high injury areas	



ENG-7: Improve Pedestrian Signals	
<b>Lead:</b> Transportation	<b>Support:</b> State Highway Admin.
<b>Action:</b> Complete a comprehensive review of pedestrian timings at the 750+ County-maintained signalized intersections to ensure they meet the revised walking speed standard. Use latest technology and standards to implement innovative pedestrian and bicycle signals (such as leading pedestrian interval, HAWK beacon, Barnes dance, etc.) to provide effective and safe crossing.	
<b>Why do this:</b> Pedestrian signals must allow enough time for all pedestrians to cross safely	
<b>Deadline:</b> Ongoing effort	
<b>Metric(s):</b> Percentage of pedestrian signals meeting walking speed standards	

ENG-9: Expand Low-Stress Bicycle Network	
<b>Lead:</b> Transportation	<b>Support:</b> Park and Planning, State Highway Admin.
<b>Action:</b> Using the Bicycle Master Plan as a guide, construct new bikeway facilities to create a highly-connected, convenient and low-stress bicycling network	
<b>Why do this:</b> A low-stress bicycle network allows for more people to bike and create needed separation from traffic	
<b>Deadline:</b> Ongoing Effort	
<b>Metric(s):</b> Percentage of roadways defined as "low-stress" for bicycle riders	

ENG-8: Accelerate Sidewalk Building	
<b>Lead:</b> Transportation	<b>Support:</b> State Highway Admin.
<b>Action:</b> Using the sidewalk inventory as a guide, accelerate the sidewalk building program with priority projects in high injury areas	
<b>Why do this:</b> Safe facilities can reduce the number of pedestrians and cyclists in the roadway	
<b>Deadline:</b> Publish a list identifying high priority areas lacking sidewalks by 4/1/2018 and complete priority projects by 10/1/2019	
<b>Metric(s):</b> Linear feet of sidewalk produced	





## LEAD:

Montgomery County Police

## Key Outcome:

Hours of dedicated enforcement for factors contributing to severe and fatal collisions



## ENFORCEMENT

Vision Zero needs more than improved transportation infrastructure; it requires building a culture of safety. To encourage safe behavior, Vision Zero communities utilize evidence-based law enforcement methods, both automated and with police officers.<sup>9</sup> For example, publicized sobriety checkpoints can reduce alcohol-related collisions by 17%.<sup>10</sup> Enforcement actions will be combined with education efforts to maximize impact and ensure equitable outcomes.

### ENF-1: Establish Collision Review Team

**Lead:** Police

**Support:** Transportation, CountyStat, Park and Planning, State Highway Admin.

**Action:** Establish a multi-disciplinary review team that will review each fatal crash as soon as possible after the event to identify potential actions the County can take at that or other similar locations to address safety issues. The team should look at all possible causal factors and present findings to the public.

**Why do this:** The team ensures diverse perspectives are represented when determining potential counter-measures to respond to traffic fatalities.

**Deadline:** Establish team by 11/15/2017

**Metric(s):** Complete Action

### ENF-2: Increase Enforcement Activities

**Lead:** Police

**Support:** Transportation, Public Information

**Action:** Increase enforcement of distracted, impaired, and aggressive driving behaviors, as well as violations of pedestrian and bicycle safety laws. Enforcement activities should concentrate in the high injury areas, during peak seasons, and specific times of day. Enforcement should be performed in conjunction with education campaigns.

**Why do this:** For enforcement to be effective at curbing dangerous driving behaviors, there must be consistent high visibility enforcement

**Deadline:** Ongoing Effort

**Metric(s):** Hours of dedicated enforcement



### ENF-3: Expand Automated Enforcement

**Lead:** Police

**Support:** Transportation

**Action:** Increase the use of automated enforcement to address excessive speeds, red-light, and stopped bus violations

**Why do this:** Automated enforcement has been proven to curb dangerous driving behaviors when used at appropriate locations in the County

**Deadline:** Ongoing Effort

**Metric(s):** Reduction in speed related crashes along Safe Speed corridors

### ENF-4: Improved Distracted Driving Detection

**Lead:** Police

**Support:** N/A

**Action:** Use unmarked cars to assist with aggressive and distracted driving enforcement

**Why do this:** Unmarked police vehicles can be more effective at identifying distracted drivers

**Deadline:** Purchase unmarked vehicles by 12/1/2018

**Metric(s):** Complete Action

### ENF-5: Collaboration with Court System

**Lead:** Police

**Support:** MD Courts

**Action:** When possible and practical, inform judicial system regarding high visibility enforcement and its connection to traffic safety

**Why do this:** Enforcement actions need to be supported and reinforced by judicial system

**Deadline:** Complete initial outreach by 4/1/2018

**Metric(s):** Complete Action

## POLICING AND EQUITY IN VISION ZERO

The Montgomery County Police Department is committed to maintaining respect for individual rights and human dignity in all interactions with our diverse community. As part of that promise, MCPD will carry out its high visibility enforcement efforts by:

- Collaborating with the Department of Transportation, Office of Public Information, and regional partners to combine education activity with enforcement efforts
- Use collision data to target the areas and behaviors that lead to severe and fatal collisions
- Adopt the recommendations of the equity task force as outlined in action item LPA-2
- Continue to post traffic citation data on the County's open data portal, which includes the person's race and gender
- Continue automated photo enforcement







## LEAD:

Public Information Office

## Key Outcome:

Increased awareness of dangerous driving, biking, and walking behaviors



## EDUCATION AND TRAINING

Creating a safety culture in Montgomery County is not limited to issuing warnings and citations. The County must engage the public and County employees using a variety of outreach methods to instill safe behaviors. Tied with enforcement in high injury areas, Montgomery County will be a safe place to get from point A to point B.

### EDU-1: Create Comprehensive Outreach Strategy

**Lead:** Public Information

**Support:** Transportation, Police, CountyStat

**Action:** Develop a communication and outreach strategy for specific groups most at risk of being involved in a severe or fatal collision (e.g. seniors, school-aged kids, persons with disabilities)

**Why do this:** Need a strategy to properly identify the means in which the County will perform outreach

**Deadline:** Publish strategy by 4/1/2018

**Metric(s):** Complete Action

### EDU-2: Expand Safe Routes to School Activities

**Lead:** Transportation, Public Schools

**Support:** VZ Steering Committee

**Action:** Expand the County's Safe Routes to School (SRTS) activities to all schools and initiate comprehensive traffic safety education for pedestrian, bicycle, and driver safety at appropriate ages

**Why do this:** Through SRTS, the County Government and Public Schools can initiate targeted education and engineering projects to improve the pedestrian environment and encourage more students to walk or bike to their school

**Deadline:** Have agreement between MCPS and MCDOT to expand SRTS activities by start of 2019-2020 school year

**Metric(s):** Reduction in severe and fatal collisions involving school-aged children



<b>EDU-3: On-bike Education Programs for Kids</b>	
<b>Lead:</b> Transportation, Public Schools	<b>Support:</b> County Executive's Office, Police
<b>Action:</b> Establish an on-bike education program to teach bike safety skills to all elementary school children	
<b>Why do this:</b> School-aged children are over-represented in bicycle collisions. Working in schools is the best way to reach this group.	
<b>Deadline:</b> Have agreement between MCPS and MCDOT by start of 2019-2020 school year	
<b>Metric(s):</b> Reduction in severe and fatal collisions involving school-aged children on bicycles	

<b>EDU-4: Vision Zero Outreach Grant Program</b>	
<b>Lead:</b> VZ Steering Committee	<b>Support:</b> Public Information, County Executive's Office, Transportation, Management and Budget
<b>Action:</b> Establish a fund to allow government and non-governmental agencies to target education to specific at-risk groups. Groups receiving funds must have a clear link to the Vision Zero, create a business plan for outreach efforts, and provide, at minimum, yearly activity reports.	
<b>Why do this:</b> Montgomery County Government has limited staff and resources to do targeted outreach. Non-governmental organizations in the community can utilize their existing networks to better reach specific groups.	
<b>Deadline:</b> Solicit proposals by 6/1/2018	
<b>Metric(s):</b> Increased awareness of dangerous driving, biking, and walking behaviors	

<b>EDU-5: Safety Awareness Training for County Employees</b>	
<b>Lead:</b> VZ Steering Committee	<b>Support:</b> Transportation, Police, Public Schools, Park and Planning, County Executive's Office
<b>Action:</b> Educate key staff in MCDOT, MCPD, MCPS, M-NCPPC, and the County Executive's Office on the tenants of Vision Zero either in formal presentations, roll calls, senior management meetings, etc.	
<b>Why do this:</b> Frontline employees must be aware of Vision Zero in order to build the culture of safety and accountability.	
<b>Deadline:</b> Complete first round of awareness trainings by 10/1/2018	
<b>Metric(s):</b> Number of County employees given training	

<b>EDU-6: Cross-Departmental Team Building</b>	
<b>Lead:</b> VZ Steering Committee	<b>Support:</b> Transportation, Police, Public Schools, Park and Planning, County Executive's Office
<b>Action:</b> Create opportunities for team building and communication across departments participating in Vision Zero	
<b>Why do this:</b> Need to create cross collaboration opportunities in order to reinforce the culture change required to implement Vision Zero	
<b>Deadline:</b> Hold at least two collaboration events by 10/1/2018	
<b>Metric(s):</b> Number of collaboration events held each year	



EDU-7: Raise Awareness of Sleep and Safety	
<b>Lead:</b> Fire and Rescue, Police, Transportation	<b>Support:</b> Public Information
<b>Action:</b> Use County programs to increase awareness of the safety impacts of sleep apnea, fatigue, drowsy driving and vehicle operation by those medically at risk, as well as older drivers	
<b>Why do this:</b> Impaired driving is not limited to drug and alcohol use. Drivers should be aware of when they are too fatigued to drive.	
<b>Deadline:</b> Complete first round of awareness trainings by 10/1/2018	
<b>Metric(s):</b> Number of County employees given training	

### Street Smart

This photo from the spring 2017 Street Smart campaign kickoff highlights safety messages that can be seen around the DC region. Learn more about regional efforts to create safer streets at [beststreetsmart.net](http://beststreetsmart.net).



EDU-8: Future Technology Task Force	
<b>Lead:</b> Chief Innovation Officer	<b>Support:</b> Transportation, Police, Public Information
<b>Action:</b> Establish a future technology task force to keep track and report on new technologies and methods that can improve the County's Vision Zero efforts. The task force should report on, but not limited to, new roadway countermeasures, safety enforcement, driverless vehicles, and new vehicle technology.	
<b>Why do this:</b> The County must stay abreast of what is happening with vehicle and roadway technology. Some advancements may help with roadway safety (collision avoidance systems) where others may cause more distractions (entertainment systems).	
<b>Deadline:</b> Provide first report by 12/1/2018	
<b>Metric(s):</b> Complete Action	

EDU-9: Training in the Community	
<b>Lead:</b> Public Information	<b>Support:</b> Transportation
<b>Action:</b> Identify major employers, TDM programs, and HOAs to deliver Vision Zero training and messaging	
<b>Why do this:</b> Community partners are necessary to build a culture of traffic safety in the County	
<b>Deadline:</b> Create outreach material and identify partners by December 2018	
<b>Metric(s):</b> Number of businesses/groups participating in Vision Zero programming	





## LEAD:

Fire and Rescue Service

## Key Outcome:

Maintain response times for traffic collisions with injuries based on dept. standards



## TRAFFIC INCIDENT MANAGEMENT

Montgomery County residents have access to level 1 and level 2 trauma centers and an accredited Fire and Rescue Service that can decrease the morbidity and mortality of a collision through proper transport and care.<sup>11</sup> The Traffic Incident Management action area will ensure that when collisions occur in the County, prompt care will be provided.

Rapid response to car collisions is crucial, but will not come at the expense of safety for first responders. Collisions are a leading cause of fatalities for both police and fire public safety employees.<sup>12,13</sup> The County will ensure the protection of the public and its employees through safe responses and on-scene traffic management.

### TIM-1: Provide Prompt Emergency Medical Service

**Lead:** Fire and Rescue

**Support:** Police

**Action:** Maintain time to scene and time to hospital response times that meet or exceed department standards

**Why do this:** A key measure of service quality for Fire and Rescue service is a prompt response to medical emergencies

**Deadline:** Ongoing effort

**Metric(s):** Maintain response times for traffic collisions with injuries based on department standards

### TIM-2: Devise Safe Incident Management Plan

**Lead:** Police, Fire and Rescue

**Support:** N/A

**Action:** Formalize a plan and training for all first responders for safe incident management

**Why do this:** Ensure safe and collaborative response to traffic collisions. Secondary crashes are often more severe than the primary crash.

**Deadline:** Establish plan by 10/1/2018

**Metric(s):** Reduction in the number of severe or fatal collisions occurring while in transport or on-scene of a traffic crash



### **TIM-3: Enhance Police Driver Training**

**Lead:** Police

**Support:** N/A

**Action:** Expand emergency response driver training program to all police officers

**Why do this:** The County as an employer must provide a safe working environment for its employees. Collisions cost taxpayers due to damaged vehicles and injured employees unable to work.

**Deadline:** Implement enhanced driver training program by 9/1/2019

**Metric(s):** Reduction in the number of severe or fatal collisions occurring while in transport or on-scene of a traffic crash

### **TIM-4: Temporary Traffic Control Devices**

**Lead:** Fire and Rescue

**Support:** Police

**Action:** Provide emergency response agencies with temporary traffic controls (e.g truck mounted attenuators and arrow boards) and suitable training to deploy these devices during emergency responses

**Why do this:** Provide a safe working environment and smooth traffic control while clearing traffic crash

**Deadline:** Procure traffic control devices for a pilot program by 10/1/2018

**Metric(s):** Reduction in the number of severe or fatal collisions occurring while in transport or on-scene of a traffic collision

## **MCFRS RESPONSE TIME STANDARDS**

The Montgomery County Fire and Rescue Service is accredited through the Commission on Fire Accreditation International (CFAI) and is the only accredited service in Maryland as of September 2017. Maintaining accreditation is no small feat as MCFRS must meet 86 core competencies and report on 252 performance indicators.

As part of MCFRS' planning and accreditation requirements, the department has developed long-range response time targets. For the most severe injuries, MCFRS provides advanced life support 2 (ALS2) service. The long-range targets for ALS2 first-arriving units are as follows:

<b>Population Density Area</b>	<b>Total Response Time 2022 Benchmarks for ALS2 Calls</b>
Metropolitan	9:30
Urban	10:15
Suburban	11:00
Rural	12:00

To learn more about response time targets, population density areas, and risk assessment, read the 2016-2022 Fire, Rescue, Emergency Medical Services and Community Risk Reduction Master Plan available at <http://www.montgomerycountymd.gov/mcfrs/>





## LEAD:

Vision Zero

Steering Committee

## Key Outcome:

Passage of significant laws and policies required to implement Vision Zero



## LAW, POLICY, AND ADVOCACY

Vision Zero is an all-hands-on-deck approach that requires the participation of all levels of government and the public to reach zero severe and fatal collisions. Actions in the Law, Policy, and Advocacy area seek to improve the way traffic safety is managed in Montgomery County by changing laws and policies that do not align with Vision Zero and advocating for the necessary tools to fully enact the Vision Zero strategy. Making these changes will allow for implementation of this Action Plan and set the stage for the Ten-Year Vision Zero plan.

### LPA-1: Change Policies, Regulations, and Laws

**Lead:** VZ Steering Committee, Office of Intergovernmental Relations

**Support:** County Executive's Office, Transportation, Police, Public Information, Park and Planning, State Highway Admin.

**Action:** Identify county and state laws, policies, and regulations that are hindering the County's progress towards Vision Zero and develop strategies to update them. Emphasis should be on laws that allow for innovative engineering (such as high intensity activated crosswalk signals) and ability to lower speed limits to align with leading Vision Zero practices.

**Why do this:** The County must have its policies, regulations, and laws reflect a safe systems approach.

**Deadline:** Identify changes needed by 12/1/2017

**Metric(s):** Successful passage of new laws, policies, and regulations identified by the Vision Zero Steering Committee

### LPA-2: Ensure Equity throughout Vision Zero Projects

**Lead:** VZ Steering Committee

**Support:** County Executive's Office, Transportation, Police, Public Information

**Action:** Establish an equity task force with community members to ensure appropriate strategies, approaches, and messaging around Vision Zero

**Why do this:** Equity is core to Vision Zero and needs to be prioritized in all actions

**Deadline:** Establish task force by 11/30/2017

**Metric(s):** Complete Action



LPA-3: Appoint Vision Zero Coordinator	
<b>Lead:</b> VZ Steering Committee	<b>Support:</b> N/A
<b>Action:</b> Appoint a Vision Zero Coordinator to oversee implementation of this plan and promote Vision Zero throughout the county	
<b>Why do this:</b> This initiative cuts across multiple departments and agencies and needs a single point of contact to ensure all projects are moving and meeting deadlines	
<b>Deadline:</b> Appoint interim manager in October 2017 with full-time coordinator by January 2018	
<b>Metric(s):</b> Complete Action	

LPA-4: Create Vision Zero Website	
<b>Lead:</b> Public Information, CountyStat	<b>Support:</b> Technology Services
<b>Action:</b> Create a Vision Zero website that contains all Vision Zero related information	
<b>Why do this:</b> A core piece of Vision Zero is connecting with the community. The Website should be promoted through a comprehensive public information and education campaign that encourages all residents to take ownership for providing data and input on the 10-year plan.	
<b>Deadline:</b> Launch initial webpage with plan release, Have full page build-out by 11/30/2017	
<b>Metric(s):</b> Complete Action	

LPA-5: Create Vision Zero Feedback Map	
<b>Lead:</b> CountyStat	<b>Support:</b> Transportation, Park and Planning, Public Information
<b>Action:</b> Create a Vision Zero concerns map that encourages the public to contribute information about crashes, near misses, and locations with perceived safety issues	
<b>Why do this:</b> The concerns map can be used to supplement the County's collision data	
<b>Deadline:</b> Publish map for public input by 11/30/2017, Update VZ Steering Committee on results quarterly	
<b>Metric(s):</b> Complete Action	

LPA-6: Create Pedestrian Master Plan	
<b>Lead:</b> Transportation, Park and Planning	<b>Support:</b> N/A
<b>Action:</b> Complete a Pedestrian Master Plan for the County to address the unique issues faced by pedestrians and people with disabilities	
<b>Why do this:</b> The County needs to have a comprehensive plan for how pedestrian facilities should be built and maintained in the County similar to the bicycle master plan	
<b>Deadline:</b> Complete master plan by 10/1/2019	
<b>Metric(s):</b> Complete Action	



LPA-7: Publish Collision Data	
<b>Lead:</b> Police	<b>Support:</b> Technology Services, CountyStat
<b>Action:</b> Publish collision data on dataMontgomery and create interactive views of the data for easier consumption and analysis by the public	
<b>Why do this:</b> By opening collision data to the public, the County's progress can be tracked in near real-time and additional insights regarding crashes can be gained from the public's analysis	
<b>Deadline:</b> Publish data by 11/1/2017	
<b>Metric(s):</b> Complete Action	

LPA-8: Improve Crash Data Collection	
<b>Lead:</b> Police	<b>Support:</b> CountyStat, Transportation
<b>Action:</b> Improve collision data collection by MCPD through prioritization of essential data elements and improved approval/revision process	
<b>Why do this:</b> Having key fields blank or filled out incorrectly hinders the data analysis and future action plan development	
<b>Deadline:</b> Start outreach by 11/30/2017	
<b>Metric(s):</b> Number of reports with key data elements missing	

LPA-9: Establish Peer Learning Opportunities	
<b>Lead:</b> VZ Steering Committee	<b>Support:</b> County Executive's Office, Transportation, Police, Public Information
<b>Action:</b> Establish links with peer Vision Zero communities to create a shared learning community	
<b>Why do this:</b> Other Vision Zero communities have lessons learned that can be used by the County	
<b>Deadline:</b> Start outreach by 12/1/2017	
<b>Metric(s):</b> Hold at least one annual meeting with other Vision Zero communities	

LPA-10: Review Existing Traffic Safety Programs	
<b>Lead:</b> VZ Steering Committee, CountyStat	<b>Support:</b> County Executive's Office, Transportation, Police, Public Information, Management and Budget
<b>Action:</b> Review existing traffic safety programs to determine their effectiveness in reaching the Vision Zero goal	
<b>Why do this:</b> All traffic safety programs should align to a safe systems approach and the County must adjust any programs that do not align	
<b>Deadline:</b> Release results by 10/1/2018	
<b>Metric(s):</b> Complete Action	



LPA-11: Work with Municipalities	
<b>Lead:</b> VZ Steering Committee	<b>Support:</b> N/A
<b>Action:</b> Encourage the larger municipalities in the County (Gaithersburg, Rockville, Takoma Park) to participate or create their own Vision Zero Plan	
<b>Why do this:</b> Working with Rockville, Gaithersburg and Takoma Park will help to address collisions that occur in those municipalities	
<b>Deadline:</b> Complete initial outreach to municipalities by 12/1/2017	
<b>Metric(s):</b> Complete Action	

LPA-12: Engage Outside Research Partners	
<b>Lead:</b> VZ Steering Committee	<b>Support:</b> N/A
<b>Action:</b> Proactively engage research organizations (such as IIHS, NIH, NHTSA) in the Vision Zero initiative to support rigorous evaluation and development of best practices	
<b>Why do this:</b> The County has organizations that can provide expertise for implementing a safe systems approach and determines what works	
<b>Deadline:</b> Reach out to potential research partners by 12/1/2017	
<b>Metric(s):</b> Complete Action	

LPA-13: Procure Safer Vehicles	
<b>Lead:</b> Fleet Management, Procurement	<b>Support:</b> VZ Steering Committee
<b>Action:</b> Adopt new vehicle fleet purchasing policy to include purchasing specifications for crash avoidance systems, side and under-run guards, mirrors and lighting for buses	
<b>Why do this:</b> Collision avoidance systems can lower the probability of being in a collision. For example, vehicles equipped with automatic braking reduce rear-end crashes by 40% <sup>14</sup>	
<b>Deadline:</b> Finalize policy by 10/1/2018	
<b>Metric(s):</b> Reduction in collisions involving County-owned vehicles	

LPA-14: Build the Ten-Year Action Plan	
<b>Lead:</b> VZ Steering Committee	<b>Support:</b> N/A
<b>Action:</b> Initiate ten-year plan development with an open and transparent process	
<b>Why do this:</b> The County must have a long-term plan to get to zero by 2030	
<b>Deadline:</b> Start developing the draft in September 2018, complete by September 2019	
<b>Metric(s):</b> Complete Action	



## SHARED MISSION, SHARED ACCOUNTABILITY

### CONTINUOUS COLLABORATION

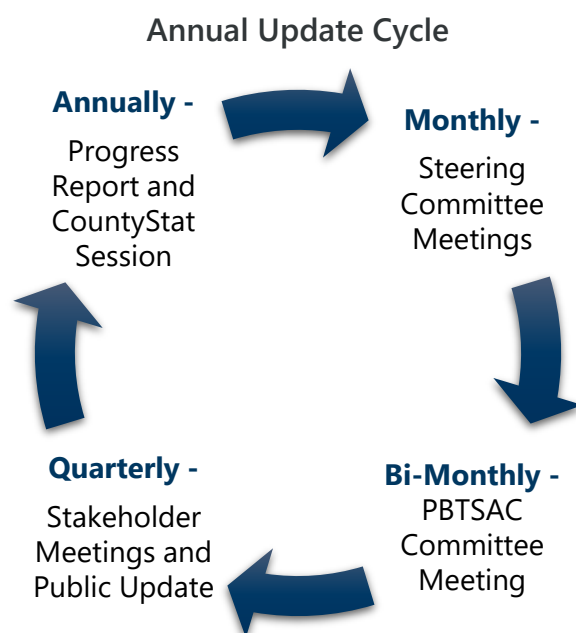
The final piece of the puzzle is to ensure accountability for this Action Plan in an open, constructive, and continuous process. The County Executive's Vision Zero Steering Committee will regularly update our collective progress in a manner that allows anyone to access this vital information and provide input.

The Steering Committee, which includes representatives of MCDOT, MCPD, PIO, MCFRS, and PBTSAC, will meet monthly to oversee progress of the Two-Year Action Plan. Public agencies and community stakeholders, many of whom are responsible for elements of the Action Plan, will meet quarterly to review progress and discuss issues regarding implementation.

### ACCOUNTABILITY

The Steering Committee, with the help of the stakeholders, will produce an annual progress report, participate in a yearly CountyStat accountability session, and oversee development of the Ten-Year Plan. The Steering Committee will coordinate a review of ongoing plans and policy development in the County to ensure concurrency with Vision Zero goals and objectives. The annual CountyStat session will track how well the County's efforts are affecting roadway safety by analyzing the relevant data, track the status of all action items, and assign corrective follow-up items as needed.

By tracking progress and determining what works, the County will build a strong base for developing a long-term Ten-Year Plan to eliminating severe and fatal collisions in Montgomery County by 2030.





## PHOTO AND ICON CREDITS

"Car," Andre Eisen from the Noun Project. Licensed under Creative Commons,

<https://thenounproject.com/search/?q=car%20top&i=20350>

"Car Accident," by Laurent Canivet from the Noun Project. Licensed under Creative Commons,

<https://thenounproject.com/term/car-accident/28287/>.

"Car Crash," Adriana Danaila from the Noun Project. Licensed under Creative Commons,

<https://thenounproject.com/term/car-crash/856714>.

"Downtown Silver Spring as seen from Sarbanes Station," Flickr/BeyondDC, Used with permission <https://flic.kr/p/yUb94D>.

"Helmet" Ersin from the Noun Project. Licensed under Creative Commons,

<https://thenounproject.com/search/?q=motorcycle%20helmet&i=963392>.

"Seat Belt," from the Noun Project. Used under public domain. <https://thenounproject.com/term/seat-belt/344>.

"Transport," Transport from SHAREICON, Licensed under Flaticon Basic License, <https://www.shareicon.net/reach-collision-cars-transport-accident-crash-693941>.

## ENDNOTES

<sup>1</sup> "Taking Safety to New Levels," *Vision Zero Initiative*, 2017, <http://www.visionzeroinitiative.com/taking-safety-to-new-levels/>.

<sup>2</sup> "Target Zero: Strategic Highway Safety Plan," *WSPT (Washington State Department of Transportation)*, 2017, <http://www.wsdot.wa.gov/planning/SHSP.htm>.

<sup>3</sup> "Vision Zero," *New York City Government*, 2017, <http://www1.nyc.gov/site/visionzero/index.page>.

<sup>4</sup> "Vision Zero Cities Map," *Vision Zero Network*, 2017, <http://visionzeronetwork.org/resources/vision-zero-cities/>.

<sup>5</sup> Erin Sauber-Schatz, PhD, David J. Ederer, MPH, Ann M. Dellinger, PhD, and Grant T. Baldwin, PhD, "Vital Signs: Motor Vehicle Injury Prevention – United States and 19 Comparison Countries," *CDC Morbidity and Mortality Weekly Report* No. 65 (July 8, 2016), [https://www.cdc.gov/mmwr/volumes/65/wr/mm6526e1.htm?s\\_cid=mm6526e1\\_w](https://www.cdc.gov/mmwr/volumes/65/wr/mm6526e1.htm?s_cid=mm6526e1_w).

<sup>6</sup> "Pedestrian Safety Initiative December 2007," *Montgomery County Government*, 2007, [http://montgomerycountymd.gov/DOT-PedSafety/Resources/Files/Program\\_Overview/ped\\_initiative.pdf](http://montgomerycountymd.gov/DOT-PedSafety/Resources/Files/Program_Overview/ped_initiative.pdf).

<sup>7</sup> "Pedestrian Safety Initiative December 2007," *Montgomery County Government*, 2007, [http://montgomerycountymd.gov/DOT-PedSafety/Resources/Files/Program\\_Overview/ped\\_initiative.pdf](http://montgomerycountymd.gov/DOT-PedSafety/Resources/Files/Program_Overview/ped_initiative.pdf).

<sup>8</sup> Montgomery County Council, Bill No. 33-13 (November 25, 2014), [https://www.montgomerycountymd.gov/COUNCIL/Resources/Files/bill/2013/20141125\\_33-13.pdf](https://www.montgomerycountymd.gov/COUNCIL/Resources/Files/bill/2013/20141125_33-13.pdf).



<sup>9</sup> "Speed Cameras Reduce Injury Crashes in Maryland County, IIHS Study Shows," *Insurance Institute for Highway Safety*, 2015, <http://www.iihs.org/iihs/sr/statusreport/article/50/8/3>.

<sup>10</sup> A. Goodwin, L. Thomas, B. Kirley, W. Hall, N. O'Brien, and K. Hill, *Countermeasures That Work: A highway Safety Countermeasure Guide for State Highway Safety Offices, Eighth Edition*, (Washington, DC: National highway Traffic Safety Administration, November 2015), <https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/812202-countermeasures-that-work-8th.pdf>.

<sup>11</sup> "The Association Between Crash Proximity to Level 1 and 2 Trauma Centers and Crash Scene Mortality of Drivers Injured in Fatal Crashes," NHTSA Traffic Safety Facts Research Note No. DOT HS 811 599 (Washington, DC: U.S. Department of Transportation, 2012), <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/811599>.

<sup>12</sup> "Characteristics of Law Enforcement Officers' Fatalities in Motor Vehicle Crashes," NHTSA Traffic Safety Facts Research Note No. DOT HS 811 411 (Washington, DC: U.S. Department of Transportation, 2011), <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/811411>.

<sup>13</sup> "Emergency Vehicle Safety Initiative," U.S. Fire Administration Report No. FA-366/February 2014, (Washington, DC: FEMA, 2014), [https://www.usfa.fema.gov/downloads/pdf/publications/fa\\_336.pdf](https://www.usfa.fema.gov/downloads/pdf/publications/fa_336.pdf).

<sup>14</sup> "Crashes Avoided: Front Crash Prevention Slashes Police-Reported Rear-End Crashes," *Insurance Institute for Highway Safety*, 2016, <http://www.iihs.org/iihs/news/desktopnews/crashes-avoided-front-crash-prevention-slashes-police-reported-rear-end-crashes>.